This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

❑ **BLACK BORDERS**

❑ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**

❑ **FADED TEXT OR DRAWING**

❑ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**

❑ **SKEWED/SLANTED IMAGES**

❑ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**

❑ **GRAY SCALE DOCUMENTS**

❑ **LINES OR MARKS ON ORIGINAL DOCUMENT**

❑ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

❑ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.
As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/316,549	05/24/1999	EMMANUEL GERLOVIN	PAS-093	7946

959 7590 09/20/2004	EXAMINER	
LAHIVE & COCKFIELD, LLP.	JONES, HUGH M	
28 STATE STREET		
BOSTON, MA 02109	ART UNIT	PAPER NUMBER
	2128	

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)	
Office Action Summary	09/316,549	GERLOVIN ET AL.	
	Examiner	Art Unit	
	Hugh Jones	2128	

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _10 June 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-14, 16-19 and 21-31_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-14, 16-19 and 21-31_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　1.☐ Certified copies of the priority documents have been received.

　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Introduction

1.   **Claims 1-33 of U. S. Application 09/316,549 filed on 24-May, 1999, are**

presented for examination. Claims 15, 20, 32-33 have been cancelled.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the
>
> manner and process of making and using it, in such full, clear, concise, and exact
>
> terms as to enable any person skilled in the art to which it pertains, or with which it is
>
> most nearly connected, to make and use the same and shall set forth the best mode
>
> contemplated by the inventor of carrying out his invention.

3.   **Claims 1-14, 16-19, 21-31 are rejected under 35 U.S.C. 112, first paragraph,**

as containing subject matter which was not described in the specification in such

a way as to enable one skilled in the art to which it pertains, or with which it is

most nearly connected, to make and/or use the invention. Applicants appear to

have relied on improperly incorporated essential matter from non-patent literature to

provide an enabling written description of the claimed invention. Applicants refer to

"Pro/ENGINEER 2000i" in the specification (lines 11-13):

> "The illustrative embodiment of the present invention is realized as part of a
>
> CAD/CAM package, such as Pro/ENGINEER 2000i, which is sold by Parametric
>
> Technology Corporation of Waltham, Massachusetts. The illustrative embodiment provides
>
> the ability to integrate an analysis into a feature-based model."

See subsequent discussion regarding incorporation by reference.

4.   There is insufficient disclosure in the specification regarding the claimed features

including:

>- providing a feature-based model of an object;

>- providing a analysis;

>- creating at least one feature in the model that contains the analysis;

>- adding the feature to the model of the object;

>- the analysis is an engineering analysis;

>- the analysis is provided by a program other than the CAD system;

>- a user of the CAD system defines and provides the analysis;

>- modifying the model when the analysis is performed again;

>- automatically updating the analysis feature based on the new results;

>- the analysis feature creates output and wherein at least some of the output of

the analysis feature is changed in the automatic updating.

5.   Applicants have only briefly referred, in the specification, to the claimed features,

without providing substantive detail, *to enable one skilled in the art to which it pertains,*

or with which it is most nearly connected, to make and/or use the invention without undo

experimentation.

6.   **Claims 1-14, 16-19, 21-31 are rejected under 35 U.S.C. 112, first paragraph,**

as containing subject matter which was not described in the specification in such

a way as to reasonably convey to one skilled in the relevant art that the

inventor(s), at the time the application was filed, had possession of the claimed

invention. Applicants appear to have relied on improperly incorporated essential matter

from non-patent literature to provide written description of the claimed invention.

Applicants refer to "Pro/ENGINEER 2000i" in the specification (lines 11-13):

> "The illustrative embodiment of the present invention is realized as part of a
>
> CAD/CAM package, such as Pro/ENGINEER 2000i, which is sold by Parametric
>
> Technology Corporation of Waltham, Massachusetts. The illustrative embodiment provides
>
> the ability to integrate an analysis into a feature-based model."

See subsequent discussion regarding incorporation by reference.

7.   There is insufficient disclosure in the specification regarding the claimed features

including:

  - creating at least one feature in the model that contains the analysis;

  - the analysis is an engineering analysis;

  - the analysis is provided by a program other than the CAD system;

  - a user of the CAD system defines and provides the analysis;

  - modifying the model when the analysis is performed again;

  - automatically updating the analysis feature based on the new results;

  - the analysis feature creates output and wherein at least some of the output of

the analysis feature is changed in the automatic updating.

8.   Applicants have not provided sufficient written description, in the specification, of

the claimed features, *to reasonably convey to one skilled in the relevant art that the*

inventor(s), at the time the application was filed, had possession of the claimed

invention.

9.   The Examiner therefore requests a copy of the *computer code* so as to determine what constituted the invention, at the time of filing.

10.   There are a number of issues relating to incorporation by reference which are addressed as they are germane to the 112(1) rejections, as indicated earlier.

11.   Section 2163.02 of the MPEP Standard for Determining Compliance With the Written Description.

"The courts have described the essential question to be addressed in a description requirement issue in a variety of ways. *An objective standard for determining compliance with the written description requirement is, "does the description clearly allow persons of ordinary skill in the art to recognize that he or she invented what is claimed."* In re Gosteli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989). Under Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991), *to satisfy the written description requirement, an applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention, and that the invention, in that context, is whatever is now claimed. The test for sufficiency of support in a parent application is whether the disclosure of the application relied upon "reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter."* Ralston Purina Co. v. Far-Mar-Co., Inc., 772 F.2d 1570, 1575, 227 USPQ 177, 179 (Fed. Cir. 1985) (quoting In re Kaslow, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983)).

Whenever the issue arises, the fundamental factual inquiry is whether a claim defines an invention that is clearly conveyed to those skilled in the art at the time the application was filed. The subject matter of the claim need not be described literally (i.e., using the same terms or in haec verba) in order for the disclosure to satisfy the description requirement. If a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application. This conclusion will result in the rejection of

the claims affected under 35 U.S.C. 112, first paragraph - description requirement, or denial of the benefit of the filing date of a previously filed application, as appropriate. 220 F.3d 1345, 55 U.S.P.Q.2d (BNA) 1636 (Fed. Cir. 2000)."

12.   Enablement and written description are separate and distinct issues as it relates to the question of incorporation by reference. A rejection based on the enablement requirement of the statute may not be sustainable in this regard since the general incorporation of a U.S. patent by reference in appellant's specification may be sufficient to indicate what is likely to be known by persons of ordinary skill in the art. Cf. In re Howarth, 654 F.2d 103, 210 USPQ 689 (CCPA 1981). *The issue of compliance with the description requirement, however, is another matter entirely.* In this connection, attention is directed to In re Blaser, 556 F.2d 534, 194 USPQ 122, 125 (CCPA 1977). The function of the description requirement is to ensure that the applicant had possession, as of the filing date of his application, of the specific subject matter later claimed by him. It is required that the specification describe the invention sufficiently for those of ordinary skill in the art to recognize that the applicant invented the subject matter he now claims. In re Smythe, 480 F.2d 1376, 178 USPQ 279, 284 (CCPA 1973). That a person skilled in the art, given the incorporated disclosures, *might* decide to combine the teachings with those explicitly disclosed by Applicants is not a sufficient indication to that person that such is described as a particular feature of appellant's invention. *The doctrine of incorporation by reference is of no avail to applicants in this regard since **there is no specific indication in the instant specification of the particular features disclosed by the incorporated references which correspond to***

those as claimed; nor does the specification *identify the specific portions of the patent* which applicant may have intended to rely upon to supplement his disclosure. The purpose of incorporation by reference in an application of matter elsewhere written down is for economy, amplification, or clarity of exposition, by means of an incorporating statement clearly identifying the subject matter which is incorporated and where it is to be found. In re de Seversky, 474 F.2d 671, 177 USPQ 144, (CCPA 1973).

13.   Reference in the instant application to literature as if it were incorporated material is not acceptable because: 1) it was not properly incorporated and, 2) it appears to be essential matter (essential matter may not be incorporated from non-patent literature).

14.   With respect to the claims, the structure corresponding to the recited functions can only be that which is described within the four corners of the instant patent specification.

15.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16.   **Claims 7, 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language.** This claim is an omnibus type claim. It is unknown what constitutes *"an external program other than the CAD system"*.

Claim Interpretation

17.   The broadest reasonable interpretation has been given to the claims. The lack of detail in the specification requires interpretation in order to carry out a prior art search. It

is interpreted that Applicant's invention is a parametric feature based model in a CAD

system which uses external programs to carry out supplemental analysis which are then

integrated into the CAD design.

18.   Claims 1-33 have not been interpreted in view of 35 U.S.C. 112, and *In re*

Donaldson, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994). Reciting the pertinent

section of 35 U.S.C. 112, paragraph six:

> An element in a claim for a combination may be expressed as a means or step for performing a specified
> function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to
> cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

19.   With respect to the claims 1-33, the structure corresponding to the recited

functions can only be that which is described within the four corners of the instant patent

specification.

20.   The Examiner makes the following interpretations. Claims 1, 9, 14, 19, 32 are

method claims, and claims 23, 27, 30, 31 are "*computer-readable medium*" claims.

21.   The claims will be interpreted as discussed for purposes of a prior art

rejection.

Double Patenting

22.   The nonstatutory double patenting rejection is based on a judicially created

doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent

and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ

645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

23.   A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

24.   Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

25.   Claims 1, 7, 14, 18-19, 23, 27, 30-31 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 8, 24 of copending Application No. 09/318,105.
Although the conflicting claims are not identical, they are not patentably distinct from each other because they are all directed to using external applications to import an analysis to a feature based CAD system.

26.   This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

27.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

28.   A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

29.   Claims 1-14, 16-19, 21-31 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sebastian et al. or Pro/Engineer Release 19 (1997 – Applicant's response to 1.56 and 1.105 – CD-ROM printout).

- ***Sebastian et al.*** disclose a computer-based engineering design system to design a part, a tool to make the part, and the process to make the part. The design system has a processor and a memory. The memory stores feature templates, each feature template being a representation of a primitive object having a form and a function. Each feature template is indexed by the function of the primitive object and includes a representation of a primitive geometric entity having the form of the primitive object. Each feature template can include information relating to a tool to make the primitive object and a process to make the primitive object. *The design system also includes an input device for receiving a request to design the part. This request includes one or more predetermined functions that the part performs. A core design module, executable by the processor, designs the part, the tool to make the part and process to make the part by accessing the plurality of feature templates in the memory to locate one or more primitive objects that perform the one or more predetermined functions.* In particular, Sebastian et al. disclose providing a feature-based model of an object; providing a analysis; creating at least one

feature in the model that contains the analysis; adding the feature to the model of the

object; the analysis is an engineering analysis; the analysis is provided by a program

other than the CAD system; a user of the CAD system defines and provides the

analysis; modifying the model when the analysis is performed again; automatically

updating the analysis feature based on the new results; the analysis feature creates

output and wherein at least some of the output of the analysis feature is changed in the

automatic updating. See fig. 6-7; col. 1, line 60 to col. 8, line 63; col. 11, lines 15-31; col.

18, lines 30-62; col. 20, lines 61-67.

Pro/Engineer Release 19 (1997 – Applicant's response to 1.56 and 1.105 – CD-

ROM printout) disclose (see Book Name: Part Modeling User's Guide – "Part Modeling"

and Book Name: Fundamentals – "Engineering Information") discloses:

- Book Name: Part Modeling User's Guide – "Part Modeling" discloses:

engineering analysis: surface curvature analysis and curvature analysis.

- Book Name: Fundamentals – "Engineering Information") discloses: engineering

analysis: "analyzing the model" (measuring, interference checks, surface analysis).

30.   **As per the claims (S: Sebastian; P: Pro/Engineer):**

- in a computer-aided design (CAD) system, a method, comprising the computer-

implemented steps of

- providing a feature-based model of an object (S: fig. 6 # 114, fig 8; P:);

- providing an analysis for acting on at least a portion of the model (S: fig. 6 (#

116, 118, col. 18, lines 17-62, col. 20, lines 61-67); P: see Book Name: Part Modeling

User's Guide – "Part Modeling" and Book Name: Fundamentals – "Engineering

Information") discloses: Book Name: Part Modeling User's Guide – "Part Modeling"

discloses: engineering analysis: surface curvature analysis and curvature analysis;

Book Name: Fundamentals – "Engineering Information") discloses: engineering

analysis: "analyzing the model" (measuring, interference checks, surface analysis).);

    - creating at least one feature in the model that contains the analysis (S: fig. 8,

fig. 6 (# 116, 118, col. 18, lines 17-62, col. 20, lines 61-67); P: see Book Name: Part

Modeling User's Guide – "Part Modeling" and Book Name: Fundamentals –

"Engineering Information") discloses: Book Name: Part Modeling User's Guide – "Part

Modeling" discloses: engineering analysis: surface curvature analysis and curvature

analysis; Book Name: Fundamentals – "Engineering Information") discloses: .

engineering analysis: "analyzing the model" (measuring, interference checks, surface

analysis).);

    - adding the feature to the model of the object (S: fig. 8, fig. 6 (# 116, 118, col.

18, lines 17-62, col. 20, lines 61-67); P: see Book Name: Part Modeling User's Guide –

"Part Modeling" and Book Name: Fundamentals – "Engineering Information") discloses:

Book Name: Part Modeling User's Guide – "Part Modeling" discloses: engineering

analysis: surface curvature analysis and curvature analysis; Book Name: Fundamentals

– "Engineering Information") discloses: engineering analysis: "analyzing the model"

(measuring, interference checks, surface analysis).);

    - wherein the analysis is an engineering analysis (S: fig. 6 # 116, 118; P:);

    - further comprising the step of performing the analysis on the model to yield

results (S: fig. 6 # 116, 118; P: see Book Name: Part Modeling User's Guide – "Part

Modeling" and Book Name: Fundamentals – "Engineering Information") discloses: Book

Name: Part Modeling User's Guide – "Part Modeling" discloses: engineering analysis:

surface curvature analysis and curvature analysis; Book Name: Fundamentals –

"Engineering Information") discloses: engineering analysis: "analyzing the model"

(measuring, interference checks, surface analysis).);

    - wherein the results of the analysis comprise graphical information (S: fig. 6 # 36

, 36b, fig. 7 # 36, 102, 104; P: see Book Name: Part Modeling User's Guide – "Part

Modeling" and Book Name: Fundamentals – "Engineering Information") discloses: Book

Name: Part Modeling User's Guide – "Part Modeling" discloses: engineering analysis:

surface curvature analysis and curvature analysis; Book Name: Fundamentals –

"Engineering Information") discloses: engineering analysis: "analyzing the model"

(measuring, interference checks, surface analysis).);

    - further comprising the steps of displaying the results of the analysis (S: fig. 6 #

36, fig. 7 # 36, 102, 104; P: see Book Name: Part Modeling User's Guide – "Part

Modeling" and Book Name: Fundamentals – "Engineering Information") discloses: Book

Name: Part Modeling User's Guide – "Part Modeling" discloses: engineering analysis:

surface curvature analysis and curvature analysis; Book Name: Fundamentals –

"Engineering Information") discloses: engineering analysis: "analyzing the model"

(measuring, interference checks, surface analysis).);

    - wherein the analysis is provided by the CAD system (S: fig. 6 (# 116, 118, col.

18, lines 17-62, col. 20, lines 61-67) ; P: see Book Name: Part Modeling User's Guide –

"Part Modeling" and Book Name: Fundamentals – "Engineering Information") discloses:

Book Name: Part Modeling User's Guide – "Part Modeling" discloses: engineering

analysis: surface curvature analysis and curvature analysis; Book Name: Fundamentals

– "Engineering Information") discloses: engineering analysis: "analyzing the model"

(measuring, interference checks, surface analysis).);

    - wherein performing the analysis using an external program other than the CAD

system , said analysis occurring prior to the creation of a feature incorporating the

analysis (S: fig. 6 (# 116, 118, col. 18, lines 17-62, col. 20, lines 61-67) ; P: see Book

Name: Part Modeling User's Guide – "Part Modeling" and Book Name: Fundamentals –

"Engineering Information") discloses: Book Name: Part Modeling User's Guide – "Part

Modeling" discloses: engineering analysis: surface curvature analysis and curvature

analysis; Book Name: Fundamentals – "Engineering Information") discloses:

engineering analysis: "analyzing the model" (measuring, interference checks, surface

analysis).);

    - wherein a user of the CAD system defines and provides the analysis (S: fig. 6 #

36b; P: see Book Name: Part Modeling User's Guide – "Part Modeling" and Book

Name: Fundamentals – "Engineering Information") discloses: Book Name: Part

Modeling User's Guide – "Part Modeling" discloses: engineering analysis: surface

curvature analysis and curvature analysis; Book Name: Fundamentals – "Engineering

Information") discloses: engineering analysis: "analyzing the model" (measuring,

interference checks, surface analysis).);

Response to Arguments

31.   Applicant's arguments filed 6/10/2004 have been fully considered but they are

not persuasive.

Response to Arguments - 112(1) Enablement Rejections (pp. 3-6, paper # 6;

response – 6/10/2004)

32.   Applicant's arguments filed 9/10/2002 and 6/10/2004 have been fully considered

but they are not persuasive.

33.   Applicants argue that the claimed features are supported in the

specification. However, Applicants merely refer to a few lines for each feature.

Such lack of detail indicates that the **subject matter was not described in the**

specification in such a way as to enable one skilled in the art to which it

pertains, or with which it is most nearly connected, to make and/or use the

invention. Applicants are again reminded that the enablement rejection was

applied after a careful review of the specification. In fact the rejection stated:

> "Applicants have only briefly referred, in the
>
> specification, to the claimed features, without
>
> providing substantive detail, *to enable one skilled in*
>
> *the art to which it pertains, or with which it is most*
>
> *nearly connected, to make and/or use the invention*
>
> *without undo experimentation.*"

34.   Furthermore, Applicants appear to have relied on improperly incorporated

essential matter from non-patent literature to provide an enabling written

description of the claimed invention. Applicants refer to "Pro/ENGINEER 2000i"

in the specification (lines 11-13):

> "The illustrative embodiment of the present invention is realized as part of a
>
> CAD/CAM package, such as Pro/ENGINEER 2000i, which is sold by Parametric
>
> Technology Corporation of Waltham, Massachusetts. The illustrative embodiment provides
>
> the ability to integrate an analysis into a feature-based model."

35.   Applicants again argue that the software package is not incorporated, but rather

merely an example of a CAD program. However, there is no discussion of any other

CAD program or how to integrate the engineering analysis (which Applicants indicate is

the central feature of the invention) into any other CAD program.

36.   As stated before, the Examiner is fully aware that Applicants did not incorporate

the package. However, the specification appears to refer to the teachings in the

package as if it were incorporated by reference. The Pro/Engineer program is not

incorporated in the specification, but is instead merely referenced. Mere reference to

another application, patent, or publication is not an incorporation of anything therein into

the application containing such reference for the purpose of the disclosure required by

35 U.S.C. 112, first paragraph. In re de Seversky, 474 F.2d 671, 177 USPQ 144 (CCPA

1973).

Response to Arguments - 112(1) Written Description Rejections (pg. 6, paper # 6; response – 6/10/2004)

37.   Applicant's arguments filed 9/10/2002 and 6/10/2004 have been fully considered but they are not persuasive.

38.   The claims were rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants appear to have relied on improperly incorporated essential matter from non-patent literature to provide written description of the claimed invention.

Applicants refer to "Pro/ENGINEER 2000i" in the specification (lines 11-13):

> "The illustrative embodiment of the present invention is realized as part of a
>
> CAD/CAM package, such as Pro/ENGINEER 2000i, which is sold by Parametric
>
> Technology Corporation of Waltham, Massachusetts. The illustrative embodiment provides
>
> the ability to integrate an analysis into a feature-based model."

39.   There is insufficient disclosure in the specification regarding the claimed features including:

- creating at least one feature in the model that contains the analysis;

- the analysis is an engineering analysis;

- the analysis is provided by a program other than the CAD system

- a user of the CAD system defines and provides the analysis;

- modifying the model when the analysis is performed again;

-   automatically updating the analysis feature based on the new results;

-   the analysis feature creates output and wherein at least some of the output of

    the analysis feature is changed in the automatic updating.

40.   Applicants argue that the software package is not incorporated, but rather merely

an example of a CAD program. However, there is no discussion of any other CAD

program or how to integrate the engineering analysis (which Applicants indicate is the

central feature of the invention) into any other CAD program.

41.   The Examiner is fully aware that Applicants did not incorporate the package.

However, the specification appears to refer to the teachings in the package as if it were

incorporated by reference. Respectfully, Applicants are arguing (against the 112

rejections) as if it were incorporated. The Pro/Engineer program is not incorporated in

the specification, but is instead merely referenced. Mere reference to another

application, patent, or publication is not an incorporation of anything therein into the

application containing such reference for the purpose of the disclosure required by 35

U.S.C. 112, first paragraph. In re de Seversky, 474 F.2d 671, 177 USPQ 144 (CCPA

1973).

42.   Applicants also argue that since the assignee has developed Pro/Engineer, that it

should follow that Applicants have satisfied the requirements for written description.

This is respectfully conclusory, abstract and without merit. The question is whether the

inventors at the time the application was filed, had possession of the claimed

invention.

43.   Applicants also argue that their IDS and the Examiner's search is evidence that the specification is enabled. Applicants have cited no case law to support such a proposition. Applicants are respectfully addressing prior art issues and not enablement issues. Furthermore, the Examiner is put in the dubious position of providing enablement to the specification based on the quality of his search, which, it is noted, occurred after Applicant's filing date.

44.   Applicant's also make the argument that it would be inconsistent to reject under 112(1) and 102. Respectfully, Applicants have cited no legal position for such an opinion.

45.   As per the *request* for source code, the Examiner was merely providing Applicant's a mechanism for traversing the 112(1) rejections. Applicant's allegation that they clearly possessed the invention is mere allegation. As per Applicant's thoughts on theft of their invention, Applicants are reminded that there are mechanisms for the Examiner to view the code, without it being publicly disclosed. The Examiner does *suggest* that such code be shown to the *Primary Examiner* by *Applicants* during an interview. Thus, Applicants could be assured that the code would remain confidential.

46.   The issue pertains to the integration of some unknown analysis feature into some unknown CAD program. Applicants did not have written description support beyond *integration of some unknown analysis feature into some unknown CAD program.*

47.   *Applicants are also reminded of the decorum and courtesy before the office as it relates* to Applicants' various *opinions* (page 8 of the response of 6/10/2004) about the Examiner's state of mind and whether the Examiner is confused. At best, this is a

conclusory and irrelevant allegation, unsupported by evidence. The Examiner is well

versed in patent law and understands the technical issues; the Examiner has conducted

himself professionally and expects the same in return. *Applicants are referred to* 37

CFR 1.3. (Business to be conducted with decorum and courtesy.).

"Applicants and their attorneys or agents are required to conduct their business

with the United States Patent and Trademark Office with decorum and courtesy. Papers

presented in violation of this requirement will be submitted to the Director and will not be

entered. A notice of the non-entry of the paper will be provided. Complaints against

examiners and other employees must be made in correspondence separate from other

papers."

Response to Arguments - 112(2) Rejections (pg. 7, paper # 6; response – 6/10/2004)

48.   Applicant's arguments filed 9/10/2002 and 6/10/2004 have been fully considered

but they are not persuasive.

49.   **Claims 7, 18 were rejected under 35 U.S.C. 112, second paragraph, as being**

indefinite in that it fails to point out what is included or excluded by the claim

language. This claim is an omnibus type claim. It is unknown what constitutes "*an*

external program other than the CAD system". Applicants argue that the feature is

supported in the specification. The Examiner respectfully is not persuaded. In any case,

the issue of whether it satisfies the enablement requirement is not the issue, but

whether the claim satisfies 112(2) paragraph.

Response to Arguments - Double Patenting Rejections (pp. 7-8, paper # 6; response – 6/10/2004)

50.   Applicant's arguments filed 9/10/2002 and 6/10/2004 have been fully considered but they are not persuasive. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are all directed to using external applications to import an analysis to a feature based CAD system.

51.   The Examiner responded to the arguments of paper # 6 by stating that "Applicant's arguments relating to parametric and non-parametric are not persuasive because because 1) Applicants admit that some of the claims are directed to "parametric" (but Applicants do not explain why those claims are not obvious variations) and 2) Applicants admit in the specification (see page 1, "background", for example) that external and internal analysis capabilities are known and used. Furthermore, Applicants are reminded that the Pro/Engineer software is at issue in both applications."

52.   Applicants have not responded, and instead merely allege a patentable distinction. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Response to Arguments - 102 Rejections (pp. 8-11, paper # 6; response – 6/10/2004)

53.   Applicant's arguments filed 9/10/2002 and 6/10/2004 been fully considered but they are not persuasive.

54.　　As noted by Applicants, Sebastian discloses Pro/Engineer. **Sebastian et al.**

disclose a computer-based engineering design system to design a part, a tool to make

the part, and the process to make the part. The design system has a processor and a

memory. The memory stores feature templates, each feature template being a

representation of a primitive object having a form and a function. Each feature template

is indexed by the function of the primitive object and includes a representation of a

primitive geometric entity having the form of the primitive object. Each feature template

can include information relating to a tool to make the primitive object and a process to

make the primitive object. **The design system also includes an input device for**

receiving a request to design the part. This request includes one or more

predetermined functions that the part performs. A core design module,

executable by the processor, designs the part, the tool to make the part and

process to make the part by accessing the plurality of feature templates in the

memory to locate one or more primitive objects that perform the one or more

predetermined functions. In particular, Sebastian et al. disclose providing a

feature-based model of an object; providing a analysis; creating at least one feature in

the model that contains the analysis; adding the feature to the model of the object; the

analysis is an engineering analysis; the analysis is provided by a program other than the

CAD system; a user of the CAD system defines and provides the analysis; modifying

the model when the analysis is performed again; automatically updating the analysis

feature based on the new results; the analysis feature creates output and wherein at

least some of the output of the analysis feature is changed in the automatic updating.

See fig. 6-7; col. 1, line 60 to col. 8, line 63; col. 11, lines 15-31; col. 18, lines 30-62; col. 20, lines 61-67.

55.   *Pro/Engineer Release 19* (1997 – Applicant's response to 1.56 and 1.105 – CD-ROM printout) disclose (see Book Name: Part Modeling User's Guide – "Part Modeling" and Book Name: Fundamentals – "Engineering Information") discloses:

- Book Name: Part Modeling User's Guide – "Part Modeling" discloses: engineering analysis: surface curvature analysis and curvature analysis.

- Book Name: Fundamentals – "Engineering Information") discloses: engineering analysis: "analyzing the model" (measuring, interference checks, surface analysis).

56.   Note particularly fig. 6 (# 116, 118); fig. 7; col. 18, lines 17-62; col. 20, lines 61-67.

57.   The Rabemanantsoa and Kalyan-Seshu et al. rejections are withdrawn because it is cumulative.

Conclusion

58.   **Any inquiry concerning this communication or earlier communications from the examiner should be:**

directed to:

Dr. Hugh Jones telephone number (703) 305-0023, Monday-Thursday 0830 to 0700 ET, **or** the examiner's supervisor, Kevin Teska, telephone number (703) 305-9704. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, telephone number (703) 305-3900.

mailed to: Commissioner of Patents and Trademarks
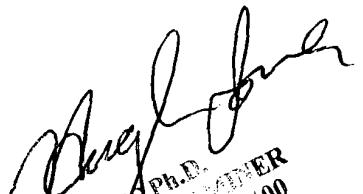
Washington, D.C. 20231

or faxed to: (703) 308-9051 (for formal communications intended for entry) *or*

(703) 308-1396 (for informal or draft communications, please label *"PROPOSED"* or *"DRAFT"*).

Dr. Hugh Jones

Primary Patent Examiner

September 8, 2004